THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

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BALTIMORE: TUESDAY, JUNE 26, 1838.

QUEEN ANNE'S COUNTY SILK COMPANY.

We are happy to learn, from a gentleman of Delaware, who derived his information from the best source, that this company have thus far been entirely successful. The Stockholders have already realized $100 a share on their stock, the par value of which is but $25 per share, and that it is now deemed to be worth $125 per share.—Such a state of things is no less gratifying in a pecuniary point of view, than it is flattering to the sagacity of those who set the enterprise on foot. In all sincerity we wish the future progress of the members of this company, in their patriotic efforts to incite the citizens of our Eastern Peninsula to engage in the culture, may be crowned with still greater success; for, as pioneers in the holy work on that shore, they are entitled to the gratitude of every true hearted Marylander.

AMERICAN SILK HANDKERCHIEFS.

Feeling as we do a sincere interest in the success of the Silk Culture in America, we copy the subjoined article with feelings of pride and pleasure, as it demonstrates, not only the practicability of profitably manufacturing the raw material; but the existence of that generous spirit of enterprise which will ultimately lead our citizens into the adoption of the culture of silk as an important branch of husbandry. We have for several years made it the subject of our study, and after the maturest consideration which we have been able to give to it, we have no hesitation in declaring, that it is susceptible of being made the most profitable of all human employments.

Silk.—The West Chester Silk Company had a sale of handkerchiefs, manufactured from their own silk, on Tuesday last. There were 35 in number—and the aggregate proceeds were $71.-05. They were knocked off in quick time at from $1.75 to $3.00 a piece, to the supporters of domestic industry. Pretty well for Chester county—there is none of the odor of monarchy about these articles. A man with an American handkerchief in his pocket, steps prouder and quicker. There is a magic in some things at least that are American.—*West Chester (Pa.) Village Record.*

BUILDING STONE FENCE.

To the Editor of the Farmer and Gardener:

Much error has prevailed in the manner of building stone fence, and error in this matter is attended with serious loss to the farmer, since there is no kind of fence, in ordinary use, so expensive, and if well built, so cheap in the end. A few observations upon this subject may not be amiss to those who are desirous of constructing this fence.

The first material error, but too common, has arisen from giving to the wall too wide a foundation, as much as 3 ft., 3½, and sometimes 4 feet, and then by drawing it in, or to use a mason's term, battering too much. Two evils spring from this mode of building; the fence is very apt to bulge, or split in two, and the facility for sheep or hogs to run over it, is as obvious as the fact itself is common. Again: fence built after this manner takes more stone than is really necessary, and however abundant the material may be, the mode of construction is radically wrong. The fence, which I have as yet built, about 200 yards is after this fashion: 2½ feet wide at bottom, and 1½ at top—height 4½ feet—a trench over 2½ ft. wide, and about 5 inches deep, is first made, and rarely more so, unless on ground liable to wash, as by a road side, ascending a hill, where a deep gully has been made: on stony ground, it may be dispensed with; but otherwise it is safe to dig a shallow foundation, as the action of the frost is thereby prevented, and which, I am very confident, has proved injurious in a high degree, when this precaution has been overlooked.

A fence of these dimensions, of good stone, and built by a skilful workman, I feel well assured, may endure for ages. But the laying of the stone aright is an object of the greatest importance; without especial care in this, serious mischief will follow. As a general rule then, indeed almost invariably, the stone ought to be placed crosswise and not lengthwise of the fence (a very common practice to give it a pretty facing) and altho' in comparison, but few will be found long enough to go through and thus serve as *binders*, yet many will pass more than half way, and so by overlaying alternately from side to side, the middle will be kept well bound, and the whole structure solid and compact. It is obvious to reason, as it has been often proved by experiment, that by laying stones lengthwise of the fence, and filling in the centre with small pieces, speedy dilapidation must take place. In short, with some modification, the rules, which govern in masonry, should be observed in the construction of this fence. Now the only material variation, which I would suggest, is this: the masons (to adopt their terms) use *stretchers* chiefly and *headers* occasionally to bind the wall; but they use mortar, and that without stint, to consolidate the structure. As masons use stretchers to give a handsome facing, and mortar to impart strength, let the stone fence builder use headers altogether, or nearly, as he cannot be allowed any cement. Let me give an example. Take a stone 15 inches long and 4 wide, or 2 feet long and 6 inches wide, and put them across the fence, instead of lengthwise; is it not manifest, that they will be infinitely less liable to be displaced? I grant that stones may be placed lengthwise with great safety, provided especial care be taken to have the next course put on transversely; but it should be borne in mind, that it is not easy always to procure stone for this purpose of sufficiently good quality, for in this case, the stone should pass entirely through, whereas if all pass inwards or across, stone of an inferior quality will make a very substantial fence.

Thus you have the breadth at bottom and top, and the height and mode of building as practised by myself. Some of my fence has been built 3 years, and is as good in all respects as when first made. In passing, it is to the eye apparently perpendicular. No animal will attempt to leap over it. On top I place flat stones the width of the fence; this prevents the smaller stones from being knocked off. If stakes and rails were put on, they would serve nearly the same purpose; in which case, the height might not be quite so great, say 4 ft. 2 inches. The cost is greater than post and rail, but if *well built*, there is an end to future labor, expense and repairs.

June, 1838. A VIRGINIA FARMER.

[For the Farmer and Gardener.]

GRAZING OF SHEEP IN CORN FIELDS.

BALTIMORE, June 21, 1838.

Mr. Roberts—A few days since while riding in the country with a friend, about 12 miles from this city, we observed a flock of sheep deliberately *feeding in a corn field*. Supposing they were trespassers, we lost no time in informing the proprietor of the circumstance; when to our surprise he laughed and said they would do no harm, that they were put in the field for the purpose of destroying the blue grass, &c., and farther, that sheep would never touch growing corn! Nothing but the sight of the experiment with my own eyes would have made me believe this statement; but having seen it, and observed also the manner in which, our information that the sheep were in his corn field, was received by him, I was obliged to yield my belief. You will readily see the importance, in various bearings, of this information to our farmers, without a special detail or reference.

Yours, &c.
GIDEON B. SMITH.

COLUMBIAN HORTICULTURAL SOCIETY.

The late Exhibition.——On Wednesday and Thursday last the public exhibition of this useful and valuable institution was held at Carusi's Saloon, agreeably to public announcement. The spacious and well-adapted apartment was arranged with great taste, and made a very handsome appearance; the numerous and beautiful flowers and plants imparting a delightful fragrance on every side. It was evident that the ladies had been busily employed, aiding the Committee of Arrangements, in producing that gratifying and imposing effect which struck every beholder who promenaded the saloon on the two days of the exhibition. The weather on Wednesday and Thursday last, being uncommonly hot and oppressive, the company in attendance during the day was not very numerous. In the evening, however, of both days, from sunset to ten o'clock, the Saloon was crowded with a very genteel, fashionable and enlightened company; amongst whom we noticed several foreign ministers, members of Congress, distinguished strangers, and clergymen. On the last evening, when about the close of the exhibition, an appropriate address was delivered by R. S. Coxe, Esq. the Saloon was unusually crowded. The Marine Band, as heretofore, was in attendance, and enlivened the company with their excellent music. Upon the whole, the Exhibition was well attended, and although, perhaps, the collection of flowers and plants was not equal to what has been witnessed on former occasions, it was a very gratifying and pleasing spectacle, which reflected much credit upon the Committee of Arrangements and their fair assistants.

We propose to notice the most striking specimens that were exhibited in the three departments of Flowers, Fruits and Vegetables; and, in doing so, we wish it may be understood, that it is probable many deserving articles may have escaped *our* attention, which will be hereafter noticed, according to their merit, in the official report, to be, in due time, laid before the public.—*Nat. Int.*

FLOWERS.

From Linnæn Hill, a collection of Geraniums in flower, Calceolarias, Roses, &c.

Mrs. Pierce exhibited some wreaths of the new Heartsease, raised by herself, the flowers very large, and of fine colors; some very good Pæonias, and specimens of some new Roses. Two fine Dahlias in full bloom, found many admirers.

Mr. Douglas exhibited a large collection of Geraniums, Roses, Calceolarias, Petunias, Cactuses, and a number of rare plants; among them, the Nandina domestica, in flower for the first time in this place.

Cactus Speciosissimus, the finest ever exhibited here, with four flowers expanded. It excited the admiration of every beholder; and was, from the beginning to the close of the exhibition, surrounded by a group of admirers. This collection also contained that curious and irritable flower the Hylidium.

Mr. Buist exhibited a great number of beautiful Geraniums, Calceolarias, Roses, &c.; a choice collection of rare plants; among them, Astrapœa Wallichii, several species of the beautiful tropical figs, such as Ficus elastica, australis, nitida, &c. fine New Holland Acacias. A beautiful specimen of Acacia lophanta, much admired for its minute feathering foliage.

By Col. Fowler, of Georgetown, a beautiful Cactus Jenkinsonii, full of splendid carmine-colored flowers. This and Mr. Douglass' Cactus speciosissimus were two of the most brilliant flowering plants in the room.

Mrs. M. Mason, Mrs. Thompson, and Mr. Geo. Thomas, exhibited fine large growing Carnations, Pinks in full bloom.

By Miss F. Clark, Cactus speciosus, with several of its delicate and pretty flowers expanded.

From Georgetown College, a number of rare plants; among them, a Cocoa-nut tree from Havana, a number of beautiful species of Fig marigold, (mesimbryanthemum) in flower, several Cactuses, Aloes, large Petunias, large Nandina domestica, coming into flower, scarlet Passion flower, several New Holland plants, and rare exotics.

Among cut flowers in vases, &c. Miss A. M. Gilman displayed her usual taste in sending a beautiful stand made of moss and native flowers, interspersed with Roses, Honeysuckles, &c. Mrs. Seaton, a large collection of Roses and garden flowers. The Misses Barnard, several vases of natives and exotics. Mrs Douglas, some beautiful green-house flowers arranged in glass dishes. Mrs. Kurtz, of Georgetown, several large bouquets tastefully arranged. Mr. Wm. Douglas, a large quantity of Greville and multiflora Roses. And very valuable additions to the floral department were made by Mrs. W. A. Weaver, Mrs. J. F. Callan, Mrs. S. Burch, and several other ladies whose names are necessarily omitted in this brief notice.

Dr. Perrine exhibited some beautiful specimens of *foliaceous fibre;* that of the wild pine-apple, upwards of seven feet long, was almost as fine and soft as silk; the Agave Sisalana appears to be superior to common hemp. It is to be hoped that the day is not far distant when we shall see these plants, (agaves, aloes, and others, bearing fibrous leaves) extensively cultivated among us.

FRUITS.

The Society had great cause to congratulate themselves on the great improvement which was apparent in the specimens of fruits exhibited on the present occasion.

Large beautiful and noble specimens of strawberries were exhibited by Dr. Bayne of Prince George's county, Wm Frazier, Wm. Cammack, Gen. Towson, Mrs. Foxall, and others.

The specimens of Hautbois Strawberries, exhibited by Mr. Ouseley, (gardener to the President of the United States,) very justly received the admiration of every visiter. His cherries and canteleupes were no less deserving of commendation.

Specimens of cherries were exhibited by Messrs. Watterston and Cammack, Gen. Towson and Dr. Riley.

Gooseberries by Mr. Cammack, (noble specimens,) Mr. Ouseley, and others, and the strawberries and canteleupes of Mr. Wm. Lack (Mr. Agg's gardener) were only equalled, not surpassed, by any others in the room.

Currants, only by Mr. Ouseley.

Apricots by Dr. Bayne and Mr. J. F. Callan.

Green-house fruits, Lemons and Oranges, by Mr. A. Suter, Dr. Riley, and Dr. McWilliams—Their contributions did them great credit. Other valuable contributions were made by gentlemen whose names will appear in the official report of the Committee of Arrangements.

VEGETABLES.

From "Wood-cut," Prince George's county, Md. fine specimen of early May pease.

By Dr. Bayne: Six early yorks, one weighing 6 lbs.; pancalian savoy, 4 lbs; and fair specimens of the string beans, mercer potatoes, and green tomatoes.

By David Barry, James O'Grady, gardener: Six cucumbers, six early yorks, one weighing 3½ lbs. four silver-skin onions, 2 lbs. very good beets and tomatoes.

By Robert Y. Brent: Two stalks of asparagus weighing 6¾ ounces.
1 stalk measuring 9 in. in length & 4 in. in circ'e.
1 do do 7½ do 4½ do

By John A. Smith: three fine early yorks, this spring's sowing, bunch turnip beets, and two frizzled Malta Cos lettuce.

By Joshua Pierce: Three long frame cucumbers of great length, two short prickly do. four royal cabbage lettuce.

By Chas. H. Wiltberger: Two brown Malta lettuce, one weighing 2½ lbs.

By Wm. Cammack: Six long frame cucumbers 20 inches in length, asparagus, four fine cauliflowers, four Asiatic lettuce, a very fine and rare vegetable, a fine specimen of the ash-leaved kidney potato, and a bunch of horn carrots.

By Adam Lindsay: Very fine bunch of beets, three long frame cucumbers from 14 to 18 inches long, rhubarb, and early yorks, this spring's sowing, 2¾ lbs.

By Mrs. Seaton: Very good asparagus, bunch of beets, good specimen of potatoes, and two cabbages.

By Mrs. Foxall: Two bunches of the giant rhubarb, bunch of turnip beets, and sea-kale, all very fine.

By Mr. Suter: Two heads of lettuce.

By Notley Young: Six fine clove onions, early york weighing 4 lbs.

By John Slater: Two early yorks, 4½ and 5lbs. bunch clove onions.

By Mr. Lack, gardener for Mr. Agg. Two cabbage lettuce, two bunches of giant rhubarb, and a fair specimen of the ash-leaf kidney potato.

By Mrs. Nicholls: Fine bunch of beets.

By John Douglas. Fine string beans, fine early horn carrots, one bunch fine white summer radishes, one do. yellow do. and six white clove onions, 2½ lbs.

By Michael Gaffney, gardener for Georgetown College: Five early york cabbages, 3½ lbs. each, fine tomatoes, and a bunch of *finochio*, (a very excellent salad,) and very superior potatoes from open grounds.

By John Ouseley, gardener to the President of the United States: Two heads of globe artichokes.

Among the other objects of curiosity and admiration which were exhibited on this occasion, a number of silk-worms in a healthy and thriving condition seemed to be very conspicuous; these silk-worms were sent in by Mr. Adam Lindsay, the father of the Columbian Horticultural Society.

[From the Northampton Courier.]

CULTURE OF SILK.

From various sources of information, it appears that our climate is better adapted to the culture of Silk than even Italy or France—where the

silk worms' eggs are often hatched by artificial heat, and sometimes are carried and hatched in the warm bosoms of the peasant women. This fact is corroborated by the personal observation of Gen. Tallmage.

Our climate is not so variable or severe as to require such tender care in hatching the eggs, or application of artificial heat during the feeding process. It is well known to our feeders that the worm may be safely and profitably fed in our open sheds or barns. May not this exposure be one cause why the fibre of American grown silk is stronger than the imported, and the waste less? And why is it not reasonable that worms tenderly nursed, should not only produce a feeble progeny, but furnish tender silk, subject to waste?—The cold of our winters does not injure, but evidently hardens the eggs; on this account would it be advisable to raise eggs at the north to supply the south?

In regard, however, to the preservation of eggs, experience has taught, that not only maturity of age is required, but that one uniform protection from autumn to the time of hatching is advisable. If, near the time of hatching, eggs are removed to a cooler situation, even to an ice house, it does not appear to impede premature hatching. To keep eggs from hatching until wanted, it has been recommended that they should be placed on ice in the ice house, as soon as the ice is taken in.

Within the last year, silk worms' eggs have been transported from Canton to the Sandwich Islands, for Mr. S. Peck. Mr. Peck is now visiting us, to witness our progress in the silk culture, and gain information of the most approved and perfect manner of reeling. He has a large mulberry plantation on one of the islands, consisting of the White, Black or Red mulberry, the Multucaulis and the genuine Canton imported from Canton—and has presonted us with a leaf of the Canton, which corresponds with ours. He has also several million of seedlings, the product of seed from the Canton mission, such as was forwarded to Northampton, and now under cultivation. Mr. Peck says his nursery of seedlings will attain the height of 12 feet this year. He has excellent water privileges, and is preparing to do a large business in the growing and reeling of silk, and has already engaged 60 machines for reeling by hand labor, besides others for water power. He will immediately have several hands under a system of instruction in the reeling department, by experienced reelers. There are others expecting to go out in the autumn, to establish business on their own account, as well as to superintend his silk establishment. He can make silk at a cheap rate, native labor being only 12½ cents per day.

The eggs which were sent to him from Canton, were deposited on paper by the millers, and overlaid with a thin, white varnish, or solution of gum arabic, to exclude air or moisture,—with directions, that when wanted for hatching, to use a brush and warm water to dissolve the gum or varnish. From our set of Chinese paintings, illustrating the whole process of silk culture in China, it is evident that the Chinese varnish the eggs *for some purpose*,—and before hatching, wet them with warm water, spread the papers on bamboo poles for draining. This dilution with warm water may facilitate the process of hatching. It may be of use to try the experiment of varnishing eggs with us, by a solution of gum arabic, when laid aside for winter: or to confine the eggs in some vessel surrounded by a mixture of glauber salt and nitre, instead of resorting to the ice house.

That the culture of silk merits the consideration and encouragement of Government, is made evident from the fact that there has been an annual increase of silk imported. It appears from public documents that in the year 1832, the value of silk imported was $9,147,812; but in the year 1836 the amount was increased to $25,083,200. With these facts before us, shall we not use every exertion to increase the growth of the raw material, not only for home consumption, but for eventual exportation?

There is no mistake in the conjecture that silk *must* and *will* become the staple of the Northern, the Middle, and even Western States, unless (Bartimeus like) we not only *cannot*, but *will not*, open our eyes upon the golden harvest which is spread before us, and may be gathered by any one who will put forth a diligent hand to the culture and growing of silk. A few enterprising individuals have already commenced operations, and it is sincerely hoped that their example will be followed by *thousands*, and their progress reported by the INSPECTOR.

USE OF LIME FOR PRESERVING FENCES AND BUILDINGS.

Mr. Editor—Calling some time since on a friend of mine, who is a curious observer of things, he communicated to me, among other items of information, his method of painting, or rather whitewashing his buildings, to preserve them from decay. I was so much interested by its simplicity, as well as cheapness, that I took a memorandum at the time of the materials used, expense, &c.

The materials are common salt and lime. Put about a quart of salt to a pail full of water, or rather as much as the water will dissolve. Then add fresh slackened lime—enough to give the proper consistency to apply with a brush. It should not be too thick, as that will cause it to peel off—and it will be necessary to put on two coats.—He says you may add paints, if you please, to give it a different color. The whole expense of the materials, and putting on the same, would not exceed two dollars and fifty cents, for a house 36 feet long, 18 wide, and 18 high.

I find also, in looking over my papers, in the New York Farmer for April, 1836, the following recipe for an 'incombustible wash for buildings,' to render them fire-proof; and also a coating for brick work, to render it impervious to water.

Proportion for five gallons. The basis is lime, which must be first slacked with hot water in a tub, and covered to keep in the steam; it then should be passed in a fluid form through a fine seive to obtain the flour of the same. Six quarts of lime, and one quart of clean rock salt for each gallon of water, to be dissolved by boiling, and skimmed clean;—then add to the five gallons, one pound of alum, half a pound of copperas, three-fourths of a pound of potash,—the last to be gradually added,—four quarts of fine sand, or hard woodashes, say hickory. You may add any colouring matter that your taste may dictate. It should then be applied with a brush; and it will, it is said, look better than paint, and be as lasting as slate. It will stop the small leaks, prevent the moss from growing, and render the parts painted with it incombustible.

Peru, Jan. 1838. J. H. J.

P. S. The 6 quarts of lime, I suppose, is for five gallons. [*Maine Farmer.*

PARSNIPS.

There is much reason to regret that this vegetable is not more cultivated among us; and that its value for feed of caule has not been tested.—We have never known a case in which it has been made the subject of field culture; and no one thinks of raising more than a few for table use in the spring. Our own cultivation has never extended farther than to the growing of 30 or 40 bushels in a season; but we cannot say why, excepting from sympathy with general prejudice and custom, we have not pursued it much more extensively, as we recollect having fed them to milch cows in the spring with very great advantage to their health and milk.

The cultivation of them is more easy than that of carrots; and the yield upon an acre is greater. The carrot plant when it first appears is not so distinguishable as the parsnip; and the weeding and thinning therefore are more troublesome.—The digging of parsnips is more difficult than that of carrots; but if planted on ridges, it may be greatly facilitated by means of a plough; and after all, the extra labor required is not a matter to be much considered. The parsnip likewise may be safely left in the ground until the spring; and then it furnishes in perfection a succulent food for cattle of the highest value, and at a season when it is particularly required. The butter made from the milk of cows fed upon parsnips is said to be distinguished by its fine flavor; and in parts of Europe, where it has been cultivated as a field crop it is stated that no vegetable food will produce more or finer beef or pork. There is no vegetable which is less liable to accident; none which has fewer enemies among the insect tribe; none for which a suitable soil is more easily found; and none which requires less expense of seed.—They are cultivated in the same way as carrots; and we recommend for all vegetables that they should be sown on ridges, and in as strait lines as can be drawn. For parsnips as well as carrots,—as there is always a liability to sow the seed too thickly,—we advise mixing the seed with a considerable quantity of dry sand; and it may then be sown evenly either with the hand or a machine. The human hand however, where there is not too much to be done, is doubtless the best of all machines. We advise likewise that carrot seed should be moistened before sowing. It will then appear early above ground before the weeds show themselves. We cannot say that the same method would not be advisable in regard to parsnips. We recommend that a trial should be made; but we have made no experiment of this matter ourselves. Parsnip seed is usually long in coming up; and on account of weeds it is very desirable to forward them.

Parsnips may be sown in the autumn or the spring. The almost universal opinion is, that if sown in the spring it is indispensable that they should be put in very early. We have the testi-

mony of two or more intelligent farmers, that they have succeeded better by late sowing than by early; and they avoid sowing until the last of May. This was a new fact to us. In this case we should deem it the more desirable if possible to forward the seed by some artificial means before planting.

It is stated upon analysis parsnips yield 90 parts of nutritive matter to 1000, and that of these 9 parts are mucilage; the rest saccharine matter.—As an article of human food they are not a favorite with most people. This, we believe, arises from their infrequent use. Probably they are quite as palatable and acceptable as potatoes were when first introduced. When sliced and fried in batter like the salsify or vegetable oyster plant, which is so much esteemed by persons of *taste*, they are not easily distinguished from it.

The leaves are said by some to make good feed for cattle, but this does nor accord with our own observation. As far as that goes, cattle are seldom inclined to touch them.—*New England Farmer.*

BLUE GRASS.

This grass, which constitutes the glory of Kentucky pastures, is esteemed superior to all others for grazing. It flourishes only on calcareous soils. Opinions and practice vary here, as to the best time of sowing it—some preferring September for the same reasons, chiefly, which relate to timothy or other grasses, others prefering February or March, to obviate the danger of the tender roots being winter killed. It is sown either on woodland or open ground—in the latter case most generally after a succession of exhausting crops in old fields. If sown on woodland, the leaves, brush and trash must be raked off or burnt. It is particularly important to burn the leaves, else the seed may be blown away with them by the wind, or if not blown away, the leaves may prevent the seed reaching the earth, and thus defeat their germination. Many of those who sow in winter, prefer casting the seed on the snow, as it enables them to effect the operation with more neatness and uniformity. In woodlands, the grass must not be grazed the first year, or at all events, till after the seeds have matured. In open land, the practice has been adopted by some, of mixing timothy and clover with blue grass, in which case half a bushel of the latter seed to the acre is sufficient. The advantage resulting from this is, that it secures at once, a well covered pasture that will bear considerable grazing the first year. The blue grass, in a few years, expels the other grasses, and takes entire possession of the field. On open ground, it is frequently sown in March upon wheat, rye or oats. If the season is favorable, it may be sown in April; but should the weather prove dry, a great portion of the seed will be lost. It is the practice, we believe, of most graziers, to put upon a given pasture, as much stock as it will maintain, without shifting them during the season, as besides saving labor, it renders the cattle more quiet and contented. Others, however, fence off their pastures into separate divisions, to undergo a regular succession of periodical grazings. This plan secures a constant supply of fresh grass, very grateful to the animals, and is believed to be more economical, as much less is trampled and rejected by the cattle. The number of animals to the acre must depend upon their size and the quantity of grass. The grass on open ground is much more abundant, sweet and nutritious, than on woodland, and consequently will maintain much more stock, perhaps nearly twice as much; while open woodland will produce much more and better grass than that which is deeply shaded. The best graziers extirpate, as fast as possible, every tree not valuable for timber or wanted for fuel, and some even prune the branches of those which are allowed to remain.—But we shall soon, we hope, be able to present this subject more at large, in some numbers which are preparing, on the grazing and stock feeding system of Kentucky, which we trust will prove interesting to all our readers and particularly instructive to the farmers in the southern portion of the state and Tennessee. Although we wish well to the tobacco growers on Green river, and would lend our aid to promote their particular interests in that pursuit, we wish they could be persuaded to adopt in its stead, the grazing business; for we are confident it is a more productive and certainly a more agreeable and less laborious one.—*Franklin Farmer.*

VALUE OF DURHAM CATTLE.

The enquiry is often put—'what can justify a farmer in giving the enormous prices demanded and obtained for Durham cattle?' We could easily give a number of reasons which we deem satisfactory; but at present will offer but one, which we think sufficient. A thorough bred bull may be bought, say $500, which we may assume as a fair averaging price—for the prices range from $300 to $1000. Now the point of the question is, how can a bull pay back in substantial benefits, the $500 paid for him? We will give a fair answer to the question; and show that the sum is returned, not merely in blood or pedigree, but in the actual improvement of those qualities in the animals produced from the bull, which every cattle raiser most desires. A good bull can safely serve 50 cows a season without injury to himself—and many have served from 80 to 100—but let us take 50. To put the proof to the severest test, we will suppose that these 50 cows are all of common stock, and that their calves are all destined for the butcher and not one kept for breeding. The question then is—'will the fifty calves pay in beef, a fair return for the sum expended in the purchase of the bull?' We answer yes; and, without going into any tedious calculations to show how much more beef they will make in a given time, than the common stock—or how much earlier they will mature—or how much time, risk, food, money and interest, are saved—we will demonstrate the truth of our opinion in the statement of the fact, that the large graziers of Fayette, Clarke and Bourbon, will give ten dollars a head more for half blood Durhams, at two years of age, merely for fattening for the butcher, than they will for common cattle at the same age. Now these graziers know perfectly well, the value of every description of cattle in the country for fattening, and they would not surely pay so much more for the half blood Durhams, than for others, if they were not justified in doing so by making a better profit from them. It is to be recollected, too, that these large graziers buy their young cattle—for none of them can breed one in ten of the number they fatten and sell. Now here are fifty calves, the produce of one season, whose superior qualities at two years of age, pay $500, (the price of the thorough bred bull) more to the breeder, than the same number of common cattle. It is needless to run out the demonstration further. Every farmer can calculate for himself the advantages of breeding several years from the bull—the greater the number of calves he could get than that we have assumed—the superior value of the heifer calves for breeding instead of butchering, &c.; and we believe no one who will candidly examine the subject, can doubt the economy of procuring, even at their high cost, this invaluable breed of cattle. When this breed shall become so widely diffused as to constitute the general stock of the country, then, and not till then will their price be graduated, like that of other cattle, by their intrinsic value merely for milk and beef.—*Franklin Farmer.*

RUTA BAGA.

QUESTIONS AND ANSWERS.

What is the average crop of Ruta Baga, to the acre, on land well manured and taken care of, in Maine?

Answer.—Six hundred bushels—each bushel weighing 64 pounds, after being well cleared of tops, dirt, and small roots. Much greater crops have often been produced; ay, from one to two thousand bushels to the acre, or at that rate on smaller roots

What are they worth, ton for ton, or pound for pound, for stock compared with good English hay, corn, potatoes, apples, &c.

Ans. When properly fed out, they may save hay, pound for pound; because if kept in any considerable quantities, stock may be kept in good condition, if poor hay, or even straw be added.—They are worth more than potatoes in equal weight; and as much as apples, and less liable to decay. To keep a creature in decent flesh, with hay, 5 bushels of Ruta Baga, are equal to a bushel of meal.

What kind of stock is best and most profitable to feed them to?

Ans. All kinds: horses and swine not excepted. If they refuse them at first, let them become hungry, and they will soon eat them well. I have wintered swine on them in a raw state. They are worth for them certainly as much as potatoes—and are most excellent for sheep.

What is the cost to raise them per bushel, compared with potatoes?

Ans. Much less; as they yield much more on a given quantity of land; their seed and planting cost less; their hoeing more; and their leaves pay the harvesting.

Are they not more exhausting to the land than potatoes, or most other crops?

Ans. They are: as much more weight is taken from the soil than by other crops. I think no one ought to object to having a large crop, because it takes more from the soil than an inferior one; but it should be known that Indian Corn will not grow well the next year after a large crop of Ruta Baga, as each require from the soil similar quantities.—*Maine Farmer.*

A strawberry measuring 7 in. in circumference weighing 1½ oz. was lately plucked near Whitby.

GEOLOGICAL SURVEY OF MARYLAND.

By Professor Ducatel.

(CONTINUED.)

Sec. IV. *General Remarks on the Agricultural condition of Montgomery county and the means of improving it.*

It will have been gathered from the preceding account that the agricultural condition of Montgomery county is far from being flourishing. At a few points only have attempts been so far made to improve it, and yet wherever these attempts have been made they have been signally successful. The valley of Hawling's River, and the vicinity of Brookville have already been instanced, and there are several farms in other directions, which by the use of clover and plaster with sometimes the combined agency of lime, have been entirely reclaimed from a very impoverished condition to one of considerable fertility. That similar results may be obtained on nearly the whole of the waste lands of the county I entertain no doubt.

A close examination into the actual condition of much the greater proportion of soils in the county has led me to two important conclusions: 1st. That superficial portions of these soils alone are in an unfit condition for a healthy vegetation, and: 2nd. That they are generally very acid and readily improved by lime. The former condition suggests the propriety of adopting the system of deep ploughing; and this is confirmed by the experience of some farmers, together with the observation of one fact made in several places, that wherever it has occurred to the proprietors to apply to the soil the loose sub-soil formed by the decomposition of the subjacent rock which is obtained in digging wells, a marked degree of fertility is always found to have been imparted. On the other hand the acidity of the soil can in no way be more effectually cured than by the addition of lime. Lime, however, besides acting as a corrector of that disposition which some soils have to throw up an acid growth, as pines, sorrel, briars, &c., that interfere and sometimes entirely prevent a more useful vegetation, will amend the soil in other ways. It will improve it mechanically, by giving body to a loose soil, and loosening a stiff one; and it is conceived that it will act *chemically*, converting the putrescible manures applied along with it into soluble compounds, from which the crops may derive a nourishment. It is, moreover, now generally admitted, that no soil can be relied upon to produce good grain crops, especially wheat, that is deficient in calcareous matter. Accordingly many opportunities have presented themselves of verifying the fact, that the decomposition of those rocks containing lime as one of their constiutents, always yields a soil naturally favorable to the growth of wheat.

If these views be correct, it follows that the system to be adopted by the farmers of Montgomery county is to plough deeply, and to lime freely. As to the latter operation, it needs but few simple directions for carrying it on. Supposing a waste field to be under process of improvement, and that it be deemed advisable to plough deeply, it would seem proper to complete that operation first, and when the land is prepared to add the lime, in the proportion of fifty bushels to the acre, which must be harrowed in afterwards. At the second tillage, or when a good layer of clover has been obtained, then fifty to one hundred bushels more to the acre should be applied upon the sward, and turned in at a moderate depth. On the other side, should the liming be carried on upon a field already under good cultivation and previously improved by the use of clover and plaster, the best plan appears to be to apply the lime upon the sod and both to be ploughed in together. In the latter case eighty to a hundred bushels of lime may be used in the first instance, and 50 bushels more on a second tillage. There can be no doubt that by proceeding in these ways most of the now waste lands of the county would be effectually reclaimed, and those already improved rendered infinitely more productive.

As to the objections made against the *cost* and *quality* of the different kinds of lime within the reach of the farmers of the county, they may be easily removed.

In reference to the cost, whatever it may be, short of a very unusual estimate put upon the material, it may be confidently asserted that it cannot be beyond its actual value. At the places where it is now accessible to the people of the county it sells for from 16 to 25 cents a bushel, and the greatest distance to which it has to be carried is fifteen miles. The experience of those who have tried it under these circumstances is, that it amply repays itself in a very short time. Indeed if it be reflected, that there is good reason to believe that the improvement brought about by lime is a permanent one, it must appear that at double its present price, it would still be the cheapest, as well as the most effectual resource. To those who are alarmed at the first cost, and who consider it a hardship to invest twenty-five dollars an acre on lands that have originally been bought at only ten dollars, it may be observed that, thereby, their value becomes enhanced tenfold; that is, they will then yield a full interest, with very little additional labor, upon one hundred dollars instead of upon ten. Where the capital necessary to carry on the operation is not at command, there would be an obvious propriety in disposing of one third, one half or even three-fourths of a farm to improve the balance; since it is easier and infinitely more profitable to cultivate one hundred acres of good land than four hundred of an improverished soil. There is an estate in Montgomery county, now in the market at five dollars an acre, to which an expenditure of twenty-five thousand dollars in lime and stock, would give an additional value at least of one hundred thousand dollars. It extends along the east side of Seneka from the vicinity of Darnsville to the Ohio and Chesapeake canal, embracing fifteen hundred acres of land, well wooded and abundantly watered, presenting sites with extensive prospects, and withal remarkably healthy. This estate belongs to Richard Smith, Esq. of the District of Columbia.

The quality of the lime intended to be used is certainly an object of interesting consideration to the farmer, but he is not to suffer himself to be prejudiced against any particular kind from some supposed impurities which it may be thought to contain. The quality of the lime may be impaired in two ways; by inherent impurities in the stone from which it is obtained; or by an injudicious mode of burning. In the former case there is but little to be feared for agricultural purposes, as the ordinary constituents of those limestones that are at all capable of being converted into lime, have no injurious properties in themselves; not even in the case of those that contain a large proportion of magnesia, which would prove hurtful to such soils alone as are already overcharged with this earth. The analysis of two specimens of limestone furnished by Mr. Ignatius Waters—No. 1 being considered of the best, and No. 2 of the most inferior kinds obtained at his quarries, gave the following result:

No. 1.		No. 2.	
Carbonate of lime,	88.5	Carbonate of lime	76
Silex,	8	Silex,	18.5
Magnesia,	a trace.	Magnesia,	2
Undetermined,	3.5	Undetermined,	3.5
	100		100

Two specimens received from Mr. Penel Palmer gave

No. 1.		No. 2	
Carbonate of lime,	88	Carbonate of lime,	80
Silex,	10	Silex,	11.5
Magnesia,		Magnesia,	3
Undetermined,	2	Undetermined,	5.5
	100		100

Two specimens selected by myself, yielded

No. 1.		N. 2.	
Carbonic Acid,	42.5	Carbonic Acid,	39
Lime,	54	Lime,	45
Silex,	3.5	Silex,	13
Magnesia,		Magnesia,	3
	100		100

These analyses show that the limestones now most in use in the upper parts of Montgomery county, are upon an average equal to the majority of those burnt in the other parts of the State; the limestones obtained from the Fredericktown valley are equally free from any impurities that might impair the value of the lime obtained from them.

As to the other circumstance impairing the quality of the lime, namely, the imperfect burning of the stone, it deserves some consideration; for, unless the stone be well and thoroughly calcined the lime it yields will be filled with *core*, adding to its weight and bulk a material of no use to the soil, as it can never become incorporated with it. It behoves the farmer, therefore, if he burn his lime himself to have it well done; or if he purchase it he should see that it is in a pulverulent state, as free from lumps and *core* as possible. Upon the subject of lime-burning, there is much yet to be enquired into, and I have reason to believe that the results of a series of experiments and inquiries that have been commenced, will enable me, at a future period, to suggest some valuable improvements in this art. The investigation relates to the best mode of constructing the kiln, the most expedient manner of disposing of the stone for its perfect calcination, the best kind of fuel, and to the most economical employment of it. The importance of the subject will at once be appreciated, here and elsewhere, when we are told that in our most usual modes of burning limestone we obtain scarcely more than six hundred bushels of lime with sixteen cords of wood, whilst we are informed that the perpetual kilns of Pennsylvania yield seven hundred bushels for every eight cords of

wood and 1 ton and a half of anthracite consumed, and in New York *two thousand* bushels of lime are burned with *twelve* cords of wood.* If it be found practicable to introduce improvements in the construction of our kilns that would enable us to realize such results, the immense benefit that would accrue to those portions of the State, as in Harford and Baltimore counties, where twenty or thirty kilns are almost constantly in operation in one vicinity, will be readily conceived.

Having failed, so far, to discover any limestone within the limits of Montgomery county, my next object was to ascertain what facilities existed for obtaining it elsewhere. Its transportation by the Chesapeake and Ohio Canal from the limestone valleys of Frederick and Washington counties, along the whole Potomac side of the county, affords a cheap and convenient means of procuring it in this direction, and it should be taken advantage of at all those places whence the stone or the lime can be easily distributed. Kilns have been erected at Georgetown, where it is understood the refuse lime is sold at 16 cents. It has been used with entire success by some farmers on the road to Rockville. At the mouth of Seneka, Mr. William Darns is about to build two kilns, from which he expects to distribute lime to the neighboring country at 25 cents a bushel. Similar enterprises might be undertaken at the mouth of the Monocacy, at the Great Falls, and in other equally eligible situations along the margin of the canal. Good compact limestone may be obtained in a low ridge lying between Bennet's creek and the Monocacy, W. of the Sugar-loaf mountain, on the farm of Mr. Simmons, where it was formerly quarried for the purpose of converting it into lime. There is also a kiln erected near the Baltimore and Ohio Rail Road, at its intersection of the road leading to New Market, which is supplied from the Fredericktown valley, but there is reason to believe that stone sufficiently pure for agicultural purposes occurs in its immediate vicinity. But the direction from which the county has been so far most abundantly supplied is in Anne Arundel county from a narrow valley about 5 miles in length, running in a N. and S. course between Green's and Snell's bridges. At its N. extremity it branches off to the E. in the direction of Clarksville. The limestone of this formation is associated with primary rocks, being in some places so mixed with *mica* as to cause it to be easily quarried into slabs; it also contains a large intermixture of *quartz*. The lines of stratification run N. E. and S. W., and the ledges dip W. with an inclination to the E. at an angle of 40 to 50 degrees. The stone is principally quarried at the bottom of the valley, though it occasionally crops out on the sides of hills, that are low with gently undulating surface. In one locality a mass of coarse *granite* breaks out at a higher elevation on the hill side, and in another a well defined *micaslate* covers the bed of limestone, which is always much more mixed with mica in its upper strata, so as to render it unfit for calcination. On the other hand, the inferior strata are free from mica, and consequently yield a very good lime, and yet again the admixture of silex and mica is sometimes so great as to occasion the fusion of the rock, when the fire of the kiln has been too much urged, or prolonged beyond a proper time. The stone is delivered at the quarries for 1 dollar a perch, it is quarried and burnt for 50 cents, and the lime sells for 16 cents a bushel.

I take the liberty of mentioning the names of several farmers who are engaged in quarrying and burning this limestone—Messers. John Hawlings, William Adams, Ignatius Waters, Nathan Haynes, Samuel Cecil, Penel Palmer,——Tyson, Mrs. Lee and Mr. Washington Gaither—to whom, as well as to others, I would suggest as advisable, that wherever there is a sufficiency of wood the kilns should be built upon the farms, and the stone carried to them, to avoid those accidents to which the lime is liable during transportation, and by which its qualities for agricultural purposes are greatly impaired. When it is only *air slacked*, as it is termed, it undergoes no injurious change, as it remains pulverulent, and is simply augmented in bulk, but if it becomes, accidentally, *water-slacked*, it is apt to run into hard lumps, that prevent it from being intimately incorporated with the soil, which is necessary for its quick and most successful action. Besides, some of the usual accidents of transportation are not likely to affect the stone, so as to occasion a total loss, which might be the case were the lime cart to become stalled during an unpropitious season. Those farmers who have no quarry of their own, and who possess facilities for burning lime, will probably find it more convenient to purchase the stone, than the lime, as they may select their own time and opportunities for burning it, and not remain dependent upon contingencies to obtain it; since it may sometimes happen that after contracting for it, it may not be ready for delivery when they are prepared to receive it, or the reverse, in which case it remains exposed and liable to injury. Again, by burning the stone upon their own premises, they have the refuse parts of the kiln, and the ashes, which may likewise be put to good account.

In thus urging upon the farmers of Montgomery county the free use of lime upon their lands, it is done with the conviction that it is the most efficient means they have at command to restore most of that which is in a very impoverished condition, and of imparting to all a degree of permanent fertility that cannot be attained in any other manner. Lime, in truth, appears for them to be the chief *desideratum*, as almost all the other advantages that a country can possess for carrying on agricultural pursuits profitably are here to be found; an improveable soil, a sufficiency of woodland, abundance of water, numerous sites for meadows, and the proximity to a populous district, seem to render it peculiarly adapted to farming, and should encourage its inhabitants to turn their attention, not only to the production of the great staple commodities of our State, but to the formation of dairies, the more extended cultivation of their root crops, of vegetables, of fruits, and, in fine, to all those resources of a farm that go to supply the wants of a large community. On the other hand, the great salubrity of the country, the unfailing supply of delicious water, together with its vicinage to the seat of the national government, renders it no less eligible to gentlemen of fortune and leisure for the selection of delightful rural retreats. It behoves the people of Montgomery to show, by well-conducted experiments, that nothing that has been stated in reference to the facility with which their lands can be made highly productive, at comparatively a moderate cost, has been exaggerated.

*Professor Shepard's Report on the Geological Survey of Connecticut.

[From the Genesee Farmer.]

FIRE BLIGHT.

Mr. Tucker—I have this day noticed an article in your Farmer of the 31st ult. controverting my theory of the cause of the *Fire Blight*, by Mr. Lazell of Ohio. From the general tenor of his communication, I am quite satisfied that he is ignorant of the true blight, and that his trees died solely from the effects of cold; the consequences would be nearly alike in both cases. If a frost should destroy all the leaf buds after they were expanded and in full vigor of sap, there would be a strong exertion of vitality to renew them by pushing out new leaflets; and in all those cases in which there were few, and not a sufficient number to elaborate the ascending sap, a stagnation ensues, fermentation commences, the whole mass is vitiated, and the tree dies. This is all right, and according to the laws of necessity.—Moreover, Mr. L's case is not a solitary one, and in no way varies from many other instances which occur from the destruction of the leaves by the cankerworm, the catterpillar, or any other case in which trees are denuded of their leaves.

Now what are the facts with respect to the blight now known as a specific disease. It has prevailed through the whole Eastern states for the last twenty years, and so severe have its ravages been in the neighborhood of Boston, that many of the old and fine varieties are in danger of becoming extinct. For the information of those parts of the country where it does not prevail, I will here state the manner in which it commences. Some years some particular neighborhoods are more subject to it than others, but in no one year, for the last twenty, has one past without my observing more or less of its ravages; which, I think, is conclusive, that severe frosts were not, and could not be, the sole cause of the disease. It commences in July, generally, and continues to affect trees during all the hot weather of summer; it commences at the end of a twig perhaps only six inches long, or it may first affect two or three feet; the leaves wilt, as though they were severed from the main branch; they immediately turn black, as does also the cambium, and shortly the whole wood, accompanied by a smell precisely like green wood and leaves when scorched by fire, and from which it derives the name of *fire blight;* a whole branch is shortly affected, and finally the whole tree. It may be effectually stopped in its early stages, by cutting off the diseased branch down to some point where a healthy limb branches off. Its appearance is sudden, without any warning, and those who wish to preserve fine fruit where the disease prevails, must not rely upon *praying* to Hercules, but must *watch* also, and *act* promptly. It attacks the *Apple*, the *Quince*, and the *Pear*, exclusively as far as my observation goes. I am not *balky*, Mr. Editor, and I do not "*give it up*," from the case cited by Mr. L. I still assert, and most fully believe, that no tree was ever struck with the real *fire blight*, until it had arrived at the period and age of blossoming; and that no branch or twig was ever affected with

it, except a decayed and diseased fruit, or its process was at its extremity. If it does, my theory falls to the ground, and I will back out so short that it shall be a *caution* to all speculative theorists hereafter. But if any person will show a well attested case to the contrary, I hereby engage to exhibit to him the secret and hidden arcana of nature, and the *modus operandi* by which she changes wheat into *chess*, which I think, is a disparity of information worth the attempting a pretty full and close observation of the disputed points.

PYRUS.

Litteria Farm, Greece, April 20, 1838.

CULTURE OF TROPICAL PLANTS.

Having accidentally seen the manuscript of the following letter to the Hon. Levi Lincoln, from a gentleman as well acquainted as any other in the country with every thing relating to Horticulture and Arboriculture, we have placed it in our columns as well for information to our readers on the matter which it treats of, as to show to them that the estimable writer has lost none of that zeal which has always distinguished him in the pursuit of objects likely to be useful or beneficial to his countrymen.

Hawthorn Cottage, Roxbury, April 17, 1838.

My dear sir,—I am very much obliged to you for the report of the Agricultural Committee on the memorial of Doct. Perrine, in relation to the culture of tropical plants in Florida, which you were so kind as to send me. I have read it with the deepest interest, instruction, and pleasure; and so favourably do I think of his honorable and patriotic enterprise, that I most sincerely hope Congress will cheerfully and promptly grant his request, and aid him in the most liberal manner.

The introduction of a single plant, or seed, has, in all ages and nations, frequently produced the most important and valuable results. The mighty influence on the agricultural industry and the general prosperity of empires which the naturalization and culture of the cereal grains, the olive, vine, white mulberry, for the silkworm, the sugar cane, coffee plant, cotton, potatoe, rice, and tobacco, have produced, is well known; and I have no doubt that several of the plants which Doct. Perrine has now growing at Cape Florida and Indian Key may speedily become staple articles of cultivation in several of the most southern States.—Besides, I do not think so meanly of the capabilities of the soil of Florida as most people. I well remember that Louisiana was called a mere alligator swamp when first, so cheaply, acquired.—The single fact that East Florida is *the only portion* of the Union where many of the most *precious tropical plants can be acclimated*, will, at no very distant period, bring every acre of land into great demand for tillage. It will be drained, diked, embanked, and converted into various kinds of plantations.

What was Holland before the dikes and canals were constructed? What has made the cotton and sugar estates of Lower Louisiana so prolific, but the *levees* for restraining the overflowings of the Mississippi? What the rice fields of South Carolina and Georgia? Human genius and indomitable industry. Where there is a cheering prospect of reward, they will triumph over all natural physical difficulties. We know the knights of Malta made fertile gardens on the barren rocks of that island, so celebrated for their chivalric deeds, and as the site of Paul's shipwreck, by pounding up the loose and scattered stones which covered its bleak surface, and importing soil from Sicily to mix with their dust. The Mexicans had floating gardens on the lake Tezcuco, where their capital city was established. The Chinese have long resorted to the same means of rearing culinary and others plants, and not an inch of soil, even though situated amidst the precipitous cliffs of the mountains, is untilled, so great is the demand for vegetable products by the thronged population of the Celestial Empire. The lemon and orange groves of Portugal and Sicily are established and maintained by an expensive and laborious system of artificial fountains and channels of irrigation. With us land is so abundant, in comparison with the population, that we have no just conception of its value, as estimated in those portions of the globe where the inhabitants are so numerous that a few roods are considered an estate so ample that the fortunate proprietor is accounted an independent man.

But, even in the vast extent of the U. States, with the millions of acres still in a state of nature, how many thousands are now cultivated which, a few generations since, ay, in our day, were deemed worthless? In England, what extensive morasses have been reclaimed, and added to the domain of agriculture, while the heath-covered mountains of Wales and Scotland are rapidly being planted with magnificent forests, not for embellishment merely, but as inexhaustible sources of wealth. The old Duke of Athol planted on his estates in Perthshire 15,536 acres, which contained 27,451,600 young trees; and his successor set out 6,500 acres of poor mountain ground solely with larches. The land was not then worth over 22 cents rent per acre, and now, with the timber on it, is valued at 32,500,000 dollars. The citizens of this country have, here and there, selected the most fertile and eligible locations, and call most of the vast remainder of the land either refuse or worthless. Time, and the increase of population, will show that nearly the whole will become more valuable than even what is now deemed the most choice. The embankments in the vicinity of New Orleans will be extended on each bank of the Mississippi, from the Gulf of Mexico to the Falls of St. Anthony.

If but one of the most valuable of the two hundred plants introduced by Dr. Perrine can be successfully cultivated, all Florida will be drained, and become luxuriant fields and gardens, and embellished by canals, rivers, bays, harbors and beautiful lakes. It will be the Cuba of this nation.

I know your liberal disposition, and enlightened and enlarged views in relation to subjects connected with agriculture, and all the great branches of national industry, and am confident you will be disposed to do what is expedient on this occasion.

Dr. Perrine, like most men of science and ardent patriotism, has devoted much time, and expended his resources, for a great purpose, sanguine in the beneficial results to the Republic, and the hope of future remuneration from his own practical exertions; and it is very desirable that he should not be left, as is too often the case, to lament his labours, and to find that others, hereafter, reap the fruits of his meritorious enterprise,—without having endured any of the toils or expense of a first experiment. Congress must be as munificent to him as would have been Henry IV. and Napoleon, to render his indefatigable researches and intelligence useful and honorable to himself and the country.

With assurances of the highest respect and esteem, your most obedient servant,

H. A. S. DEARBORN.

Hon. Levi Lincoln.

How to destroy grub worms.—We have seen the following method in some paper recommended for destroying the common grub or cut worm, which cuts off young cabbages, beets, corn, &c., and think the plan is so reasonable as to be entitled to an experiment. Make a wheel or cylinder pretty heavy, with small blocks of wood projecting from the external surface, like cogs, about six inches apart and four inches long. Roll this wheel about towards night amongst the plants. This will make a hard smooth path, with a hole of the size of the cog, every six inches on the way. The worms at night come out in search for plants. They will prefer to crawl along the smooth path made by the wheel, till—pop, they fall into the hole. The rest of the night they will busy themselves in ineffectual attempts to get out, and in the morning you may walk along and gather the worms—and destroy them. There is some philosophy in this plan to outwit a worm.

[*Augusta Banner.*

Making butter.—Putting a pint of cold water during the summer months in each pan of milk when strained from the cow, will materially aid in these desirable objects: The milk will not sour as quick, and the cream will rise more perfectly. The reason why butter becomes rancid so soon, is owing to the imperfect manner in which the milk, frequently soured before churning, is separated from the butter. Retarding the souring of the milk by the application of cold water, obviates the difficulty.

Mode of preventing the ravages of insects.—A Petersburg paper states that the water in which potatoes have been boiled, sprinkled over grain, plants, &c., completely destroys all insects in every stage of their existence, from the egg to the fly.

The crops.—For the last ten years, the crops of every description, have not looked more promising than at the present time. This is not confined to this township or county, but everywhere throughout the State, as well also as the entire Union. The accounts that reach us from every quarter, bear evidence of the same gratifying prospects. Not a desponding line have we yet seen, and we hope that even the croakers will, this year, be shamed out of their old habits.

[*Germantown Tel.*

A DURHAM BULL.

For sale, a superior Bull—he is of fine size and unexceptionable pedigree, which will be given next week—he comes from a strain of deep milkers, and is himself the sire of several fine animals. Price $500. je 26 3t

BALTIMORE PRODUCE MARKET.

☞ *These Prices are carefully corrected every* MONDA

	PER	FROM	TO
BEANS, white field,	bushel.	1 00	1 10
CATTLE, on the hoof,	100lbs	9 00	10 00
COAL, yellow	bushel	72	73
White	"	69	70
COTTON, Virginia,	pound	9	11
North Carolina,	"	10	11
Upland,	"	9½	11
Louisiana —— Alabama	"	11	12
FEATHERS,	pound.	48	50
FLAXSEED,	bushel.	1 12	——
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	——
Do. do. baker's	"	——	——
Super How. st. from stores	"	7 87	8 00
" " wagon price,	"	7 37	7 50
City Mills, super	"	7 75	8 00
" extra	"	8 00	——
Susquehanna,	"	8 00	——
Rye,	"	4 50	4 62
Kiln-dried Meal, in hhds.	hhd.	18 00	——
do. in bbls.	bbl.	3 50	——
GRASS SEEDS, wholes. red Clover,	bushel.	——	11 00
Kentucky blue	"	2 50	3 00
Timothy (herds of the north)	"	2 25	2 50
Orchard,	"	2 00	2 50
Tall meadow Oat,	"	——	3 00
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	10 00	15 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	
HOGS, on the hoof,	100lb.	7 00	——
Slaughtered,			——
HOPS—first sort,	pound.	9	——
second,	"	7	——
refuse,	"	5	——
LIME,	bushel.	33	34
MUSTARD SEED, Domestic, —; blk.	"	3 50	4 00
OATS,	"	33	34
PEAS, red eye,	bushel.	——	1 12
Black eye,	"	1 00	1 12
Lady,	"	——	——
PLASTER PARIS, in the stone, cargo,	ton.	3 62	——
Ground,	barrel.	1 50	——
PALMA CHRISTA PEAS,	bushel.	——	——
RAGS,	pound.	3	4
RYE,	bushel.	80	87
Susquehannah,	"	——	none
TOBACCO, crop, common,	100 lbs	3 50	4 00
" brown and red,	"	4 00	6 00
" fine red,	"	8 00	10 00
" wrappery, suitable for segars,	"	10 00	20 00
" yellow and red,	"	8 00	10 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	——	——
" ground leaf,	"	——	——
Virginia,	"	4 50	6 00
Rappahannock,	"	——	——
Kentucky,	"	5 00	8 00
WHEAT, white,	bushel.	1 85	— —
Red, best	"	1 55	1 60
Maryland inferior	"	——	——
WHISKEY, 1st pf. in bbls. (BOND)	gallon.	33½	34
" in hhds. (BOND)	"	32	—
" wagon price, (BOND)	"	bbls	31
WAGON FREIGHTS, to Pittsburgh,	100 lbs	1 25	— —
To Wheeling,	"	1 50	——
		washed.	unwash
WOOL, Prime & Saxon Fleeces,	pound.	40 to 50	20 22
Full Merino,	"	35 40	18 20
Three fourths Merino,	"	30 35	18 20
One half do.	"	25 30	18 20
Common & one fourth Meri.	"	25 30	18 20
Pulled,	"	28 30	18 20

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000 Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this all, and which he will sell on moderate terms

EDWARD P. ROBERTS.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.	——	——
BACON, hams, new, Balt. cured	pound.	12½	13
Shoulders, do	"	11	—
Middlings, do	"	11	—
Assorted, country,	"	8½	9½
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,	"	—	—
CIDER,	barrel.	——	——
CALVES, three to six weeks old	each.	5 00	6 00
COWS, new milch,	"	25 00	40 00
Dry,	"	12 00	15 00
CORN MEAL, for family use,	100lbs.	1 62	——
CHOP RYE,	"	1 50	1 60
EGGS,	dozen.	12½	——
FISH, Shad, No. 1, Susquehanna,	barrel.	8 75	9 00
No. 2,	"	8 50	——
Herrings, salted, No. 1,	"	4 25	4 75
Mackerel, No. 1, —— No. 2	"	——	——
No. 3,	"	——	——
Cod, salted,	cwt.	3 00	3 25
LARD,	pound.	10	11

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par	VIRGINIA.	
Branch at Baltimore,	do	Farmers Bank of Virgi.	1½
Other Branches	do	Bank of Virginia,	do
MARYLAND.		Branch at Fredericksburg,	do
Banks in Baltimore,	par	Petersburg,	do
Hagerstown,	½a	Norfolk,	do
Frederick,	do	Winchester,	do
Westminster,	do	Lynchburg,	do
Farmers' Bank of Mary'd,	do	Danville,	do
Do. payable at Easton,	do	Bank of Valley, Winch.	par
Salisbury, 1 per ct. dis.		Branch at Romney,	par
Cumberland,	par	Do. Charlestown,	par
Millington,	do	Do. Leesburg,	1½
DISTRICT.		Wheeling Banks,	3½a4
Washington, Georgetown, Alexandria, Banks, ½p.c.		Ohio Banks, generally	5a6
PENNSYLVANIA.		New Jersey Banks gen.	3
Philadelphia,	par	New York City,	par
Chambersburg,	½	New York State,	do
Gettysburg	do	Massachusetts,	1½a2
Pittsburg,	2½	Connecticut,	1½a2
York,	½	New Hampshire,	1½a2
Other Pennsylvania Bks.	2	Maine,	1½a2
Delaware [under $5]	4	Rhode Island,	1½a2
Do. [over 5]	1½	North Carolina,	5
Michigan Banks,	10	South Carolina,	5a7
Canadian do.	10	Georgia,	8a10
		New Orleans	8a10

FOR SALE,

Two superior DEVON bulls, 4 years old this spring, of the purest blood in the country, fine form and remarkably large. Any gentleman wishing to procure one will find it to his advantage to embrace the present opportunity, as they will be sold at the low price of $100 each, deliverable in Baltimore.

Applications in writing, *post paid*, to be made to the subscriber.

EDWD. P. ROBERTS, Baltimore, Md.

may 29 3t

NEW BALTIMORE SEED STORE.

THE Subscriber having located himself in *Grant street, near Pratt, three doors* in the rear of *Dinsmore & Kyle's* Grocery Store, takes this early method of informing his friends and the public, that he has commenced the GARDEN AND FIELD SEED BUSINESS, and solicits a portion of public patronage. He has on hand and intends *keeping*, at all *times*, a constant and general assortment of the very best FIELD AND GARDEN SEEDS, a part of the latter, being of the last year's importation, and all the growth of 1837.

Also GARDEN AND FARMING TOOLS, of various kinds; a few barrels of ITALIAN Spring WHEAT; BADEN CORN, raised, and carefully selected by Col. Mercer—DUTTON; MANDAN; SIOUX; AND EARLY SUGAR CORN: CLOVER; TIMOTHY, ORCHARD, & HERD'S GRASS SEEDS; BUCKWHEAT; OATS; MILLET, WHITE DUTCH CLOVER; LUCERNE; TREFOIL; SAINFOIN, ENGLISH RYE GRASS, &c. &c.

Farmers, Gardeners, Merchants, Captains of Vessels, and others, are invited to give him a call, as they can be supplied not only with Field and Garden Seeds of all kinds, but also with PLOUGHS; HARROWS; STRAW CUTTERS; CORN SHELLERS; WHEAT FANS, WHEAT CRADLES, &c. &c., together with all other kinds of useful implements of Husbandry, manufactured and kept constantly for sale by John T. Durding & Co. at their Agricultural Store, also in Grant street. Orders for articles in the above line by mail or otherwise, shall be faithfully and punctually executed.

THOMAS DENNY,

Grant street, 3 doors in the rear of Dinsmore & Kyle's

WATKINS' PATENT WHEAT FANS, HARVEST TOOLS, &c.

THE subscribers, being confident of the superiority of the Watkins' Fan have made arrangements with the Patentee to manufacture the article in this city.

The difficulty of procuring these fans from Washington county in this State, (where they were formerly manufactured) and the high price at which they were sold has much retarded their introduction in our immediate vicinity; they are now manufactured by us at a reduction of about 40 per cent. on original price, and made of warranted materials and by experienced workmen. The Riddle and Screen of this fan are operated upon by a simple crank motion, and the general construction of the fan is such as to give the wind a proper direction and great force on the riddles, thus enabling farmers to clean double the quantity of grain and put it in better order for market than can be done by those in common use. Our assortment of Fans and Harvest Tools are as follows, viz:

Watkins' Patent Fans	$30.00
do do with unshipping heads	32.00
Common Crank Shake Patent Fans,	25.00
do do do with unship heads	27.00
do Dutch Fans,	20.00
Box Fans, a very complete fan and well suited for small farms,	16.00
Grain Cradles with 4 a 8 fingers and warranted Scythes attached,	4.00
do do with wire braces,	5.00
Grass Scythes and Sneaths, in complete order for mowing	2.25
Grain, Grass and Bramble Scythes,	
Sickles and Grass Hooks,	
Scythes Stones, assorted kinds, Ripes for whetting Grain Scythes,	
Horse and Hand Hay Rakes,	
Cradlers' Hammers,	
Hay Forks, of sizes suitable for making and pitching hay,	
Threshing Machines, &c.	

ALSO,

Corn and Tobacco Cultivators, Corn Harrows, Field and Garden Hoes, and as usual, a large assortment of IMPLEMENTS AND SEEDS, comprising nearly every variety used by the planter. ROBERT SINCLAIR, Jr. & Co.

Light street near Pratt street wharf.

june 4 2t

DAHLIA ROOTS.

The subscriber can furnish any quantity of DAHLIA ROOTS to the number of *one thousand*, recommended to be a choice variety, all of the double kind, and from the well known nursery of Samuel Reeve, Esq'r. near Salem, New Jersey. I can also furnish from the same nursery very superior APPLE TREES for spring planting, if orders are given in soon for them. Peach Trees cannot be furnished from the said nursery before next fall.

J. S. EASTMAN.

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Queen Anne's county Silk Company—American silk Handkerchiefs—on building stone fences—grazing sheep in corn fields—report of the Columbian Horticultural Society—culture of silk—lime, a preserver of fences and buildings—culture of parsnips—blue grass—value of Durham cattle—ruta baga—great strawberry—geological survey of Maryland—fire blight—culture of tropical plants—to destroy grub worms—making butter—mode of preventing the ravages of insects—the crops—prices current—advertisements.